completed;

a reception light intensity level judgement circuit judging an intensity level of received light based on the electric signal resultant from conversion by said optical reception circuit, wherein circuitry of the reception light intensity level judgment circuit for judging an intensity level of received light is configured so as to output one intensity level judgment signal of a plurality of intensity level judgment signals, said one intensity level judgment signal being representative of one determined light emission intensity;

a coding circuit coding transmission data;

an optical transmission circuit determining a light emission intensity based on result of the judgement by said reception light intensity level judgement circuit and result of the judgement by said decoding circuit and converting the transmission data coded by said coding circuit to an optical signal with the determined light emission intensity; and

wherein circuitry of the optical transmission circuit for converting the transmission data to an optical signal having the light emission intensity is configured so as to be capable of outputting optical signals having any one of a plurality of light emission intensities and wherein a specific one of the plurality of light emissions intensities is selected as said determined light emission intensity responsive to said one intensity level judgment signal.

23. (NEW) The digital optical communication device according to claim 22, wherein

said reception light intensity level judgement circuit compares the electric signal resultant from conversion by said optical reception circuit with a plurality of reference voltages, and judges said intensity level of the received light based on result of the comparison.

24. (NEW) A digital optical communication device comprising:

an optical reception circuit converting an optical signal received from any external source to an electric signal;

a decoding circuit decoding the electric signal resultant from conversion by said optical reception circuit, judging whether or not the decoding is normally completed, and extracting reception light intensity information of a secondary station;

a coding circuit coding transmission data; and

an optical transmission circuit determining a light emission intensity based on the reception light intensity information of the secondary station extracted by said decoding circuit, and converting the transmission data coded by said coding circuit to an optical signal with the determined light emission intensity.

25. (NEW) The digital optical communication device according to claim 24, wherein

said decoding circuit decodes the electric signal resultant from conversion by said optical reception circuit and extracts the reception light intensity information and reception normal completion information of the secondary station, and

said optical transmission circuit determines the light emission intensity based on the reception light intensity information and the reception normal completion information of the secondary station that are extracted by said decoding circuit, and converts the transmission data coded by said coding circuit to the optical signal with the light emission intensity.

26. (NEW) A digital optical communication device comprising:

an optical reception circuit converting an optical signal received from any external source to an electric signal;

a decoding circuit decoding the electric signal resultant from conversion by said optical reception circuit and judging whether or not the decoding is normally completed;

a reception light intensity level judgement circuit judging an intensity level of

received light based on the electric signal resultant from conversion by said optical reception circuit;

a coding circuit generating reception light intensity information of a primary station based on result of the judgement by said decoding circuit and result of the judgement by said reception light intensity level judgement circuit and coding transmission data and said reception light intensity information; and

an optical transmission circuit converting the reception light intensity information and the transmission data coded by said coding circuit to an optical signal.

27. (NEW) A digital optical communication method comprising the steps of converting an optical signal received from any external source to an electric signal;

decoding said electric signal resultant from conversion and judging whether or not the decoding is normally completed;

judging an intensity level of received light based on said electric signal resultant from conversion and providing a specific one of a plurality of intensity judgment signal, said specific one judgment signal being representative of one determined light emission intensity;

coding transmission data; and

determining a light emission intensity based on said judged intensity level of the received light and on result of said judgement as to whether or not the decoding is normally completed, and converting said coded transmission data to an optical signal with the determined light emission intensity, wherein said converting includes selecting a specific one of a plurality of light emission intensities based on said specific one intensity level judgment signal.

28. (NEW) A digital optical communication method comprising the steps of:

converting an optical signal received from any external source to an electric signal;

decoding said electric signal resultant from conversion, judging whether or not

the decoding is normally completed, and extracting reception light intensity information of a secondary station;

coding transmission data; and

determining a light emission intensity based on said extracted reception light intensity information of the secondary station, and converting said coded transmission data to an optical signal with the light emission intensity.

29. (NEW) A digital optical communication method comprising the steps of:

converting an optical signal received from any external source to an electric signal;

decoding said electric signal resultant from conversion and judging whether or not the decoding is normally completed;

judging an intensity level of received light based on said electric signal resultant from conversion;

generating reception light intensity information of a primary station based on said judged intensity level of the received light and on result of said judgement as to whether or not the decoding is normally completed, and coding transmission data and said reception light intensity information; and

converting said coded reception light intensity information and said coded transmission data to an optical signal.

30. (NEW) A digital optical communication method comprising the steps of:

converting an optical signal received from any external source to an electric signal;

decoding said electric signal resultant from conversion, extracting a secondary station light emission intensity, and judging whether or not the decoding is normally completed;

judging a reception light intensity level based on said electric signal resultant from conversion;

determining a light emission intensity of a primary station based on said